Name: _____ Date: _____

Algebra 1B Pd: _____

Practice Quiz

1. Fill in the table.

QF	Does the parabola open upward or downward?	Is the vertex a minimum or maximum?	Is the QF narrower, wider or the same width as parent QF?	Write the coordinates of vertex.
$y = x^2 + 3$				
$y = -6x^2 - 5$				
$y = -2x^2 + 1$				
$y = 0.3x^2 - 5$				

2. Put the functions in order from WIDEST to NARROWEST. Use the capital letters.

A. $y = 4x^2 + 8$ B. $y = -1/4x^2 + 9$ C. $y = x^2 - 11$ D. $y = -1/8x^2 + 8$ E. $y = -5x^2 - 1$

_____

3. Describe the differences and one similarity between the graphs of $y = -x^2 + 2$ and $y = x^2 - 3$. Use complete sentences and algebraic terms. Be sure to mention at least THREE differences and ONE similarity.

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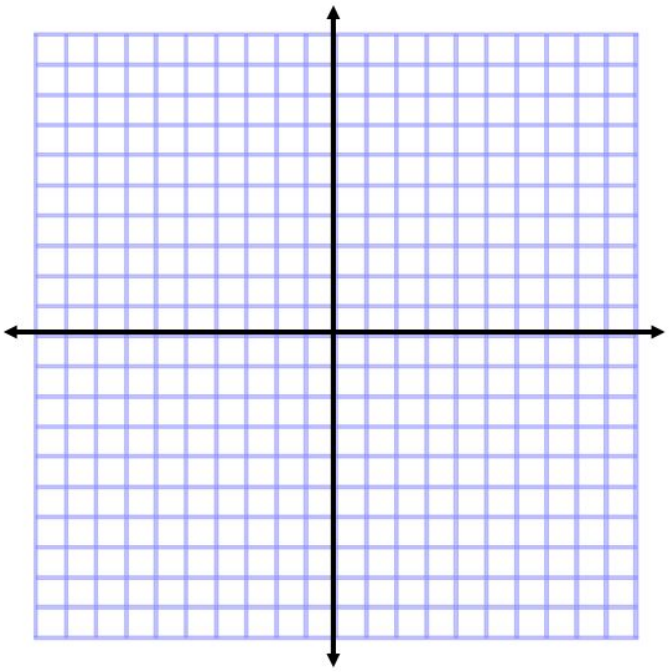
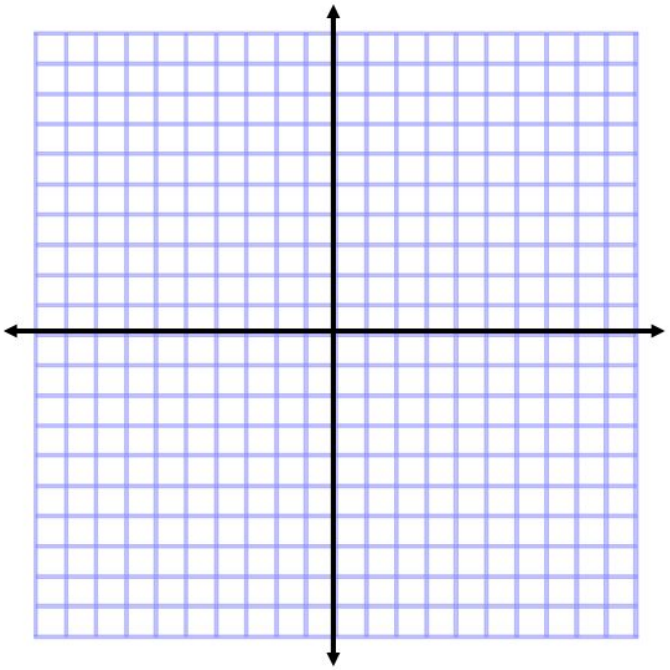
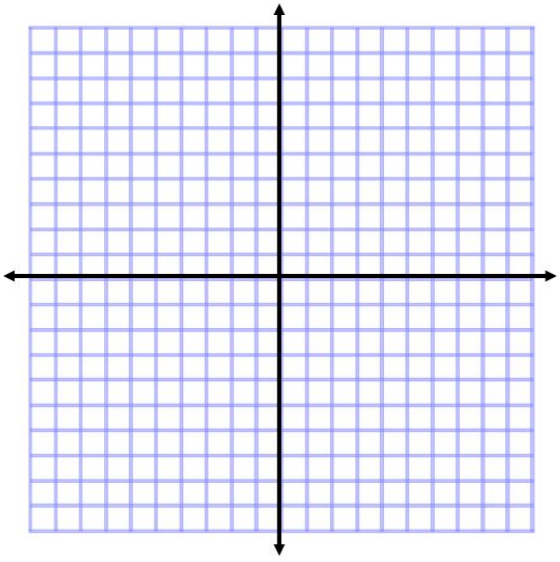
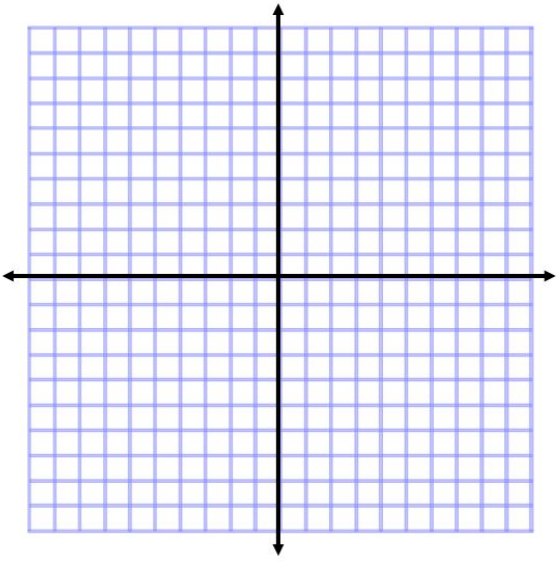
4. Graph the quadratic function $y = x^2 - 2x - 7$ **on the coordinate plane. Provide all of the requested information. BE SURE TO DASH YOUR LINE OF SYMMETRY AND NAME YOUR QUADRATIC FUNCTION. Provide all information requested.**

axis of symmetry: _____ vertex: (_____, _____) point #1: (_____, _____) reflection of point #1: (_____, _____) point #2: (_____, _____) reflection of point #2: (_____, _____)	

$y = -\frac{1}{2}x^2 + 6x - 15$ axis of symmetry: _____ vertex: (_____, _____) point #1: (_____, _____) reflection of point #1: (_____, _____) point #2: (_____, _____) reflection of point #2: (_____, _____)	

5. Solve each quadratic equation by SKETCHING the graph of the related quadratic function. You must show your sketch and write your solutions.

a. $x^2 + 5 = 0$ solution(s): _____ 	b. $2x^2 = 0$ solution(s): _____ 
c. $-x^2 - 5 = 0$ solution(s): _____	d. $-x^2 + 5 = 5$ solution(s): _____